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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,408	02/14/2005	Peter Geskes	016906-0374	4673
22428	7590	03/14/2006	EXAMINER	
FOLEY AND LARDNER LLP			LEO, LEONARD R	
SUITE 500			ART UNIT	
3000 K STREET NW			PAPER NUMBER	
WASHINGTON, DC 20007			3753	

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/524,408	Applicant(s) GESKES ET AL.	
	Examiner Leonard R. Leo	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4-7, 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-17 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Office action mailed on December 29, 2005 omitted the citation of Sugawara et al on the PTO-892. This omission was brought to the attention of the Examiner more than two months after the mailing of the Office action. Accordingly, a shortened statutory period for reply is set to expire 1 month(s) or thirty (30) days, whichever is longer, from the mailing date of this communication. See MPEP 710.06.

Election/Restrictions

Applicant's election of the species of Figure 9 in the reply filed on October 13, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 4-7 and 18-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Regarding claim 18, Figure 9 discloses flat tubes 2 having identically designed ends 8. Regarding claim 19, Figure 9 discloses partition wall 26.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 9, 11-13, 16-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugawara et al (Figure 30). Regarding claim 3, Sugawara et al (column 11, lines

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26-29) discloses the tube 5 conforms to the outer peripheral surface of the collection manifold 1. Regarding claims 11-12, the tubes 5 of Sugawara et al are inserted and soldered into recesses 60 in the collection manifold 1. Regarding claim 13, Figure 7 of Sugawara et al discloses transverse partition 22 dividing two regions 1a, 1b. Regarding claim 20, Sugawara et al (Field of the Invention) discloses the heat exchanger is in an automobile air conditioning system.

Claims 1-3, 8-13, 16-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakada et al. Regarding claim 3, Sugawara et al (column 11, lines 26-29) discloses the tube 5 conforms to the outer peripheral surface of the collection manifold 1. Regarding claims 10 and 12, the tubes 2A of Nakada et al are inserted and brazed in recesses 42 in the collection manifold. Regarding claim 13, Figure 17 of Nakada et al discloses longitudinal partition 45 dividing two regions H. Regarding claim 20, Nakada et al (Technical Field) discloses the heat exchanger can be employed in any desired environment. Arguendo, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara et al or Nakada et al in view of Kuroyanagi et al.

Sugawara et al or Nakada et al discloses all the claimed limitations except a slot in the tube end.

Kuroyanagi et al discloses a heat exchanger comprising a number of flat tubes 42, 44 connected to collection manifold regions 8, 10-11, 13 divided by longitudinal partition 16, wherein the tube end has a slot (Figure 18) for the purpose of accommodating the longitudinal partition.

Since Sugawara et al or Nakada et al and Kuroyanagi et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Kuroyanagi et al would have been recognized in the pertinent art of Sugawara et al or Nakada et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Sugawara et al or Nakada et al a slot in the tube end for the purpose of accommodating the longitudinal partition as recognized by Kuroyanagi et al. In Sugawara et al, the longitudinal partition as taught by Kuroyanagi et al complements the transverse partition 14, 15 to increase the number of passes to improve heat exchange.

Regarding claim 15, Kuroyanagi et al discloses through-openings 18 in partition 16.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3753

March 10, 2006